

# Calculations Policy: Addition

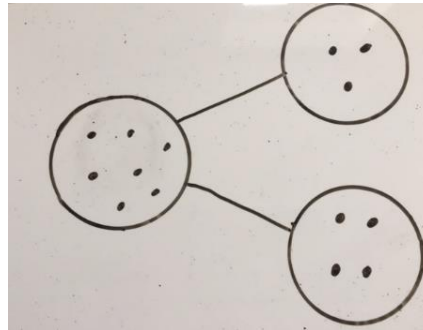
Key Language: Sum, total, parts and wholes, plus, add, altogether, more, equal to,

## Concrete

Combining two parts to make a whole (use other resources too e.g. eggs, shells, teddy bears etc)

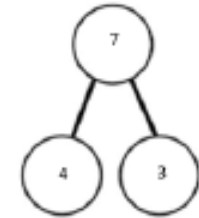


## Pictorial

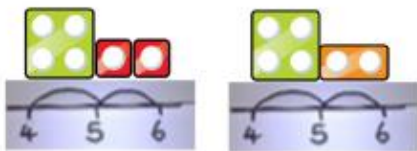


## Abstract

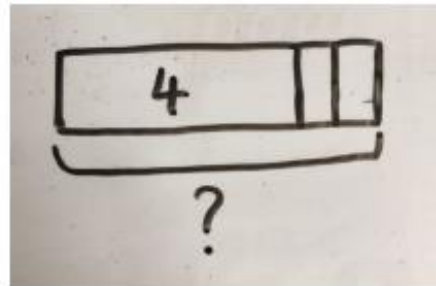
$4 + 3 = 7$   
Four is a part, 3 is a part and the whole is seven.



Counting on using number lines using cubes or Numicon.



A bar model which encourages the children to count on, rather than count all.



The abstract number line:  
What is 2 more than 4?  
What is the sum of 2 and 4?  
What is the total of 4 and 2?  
 $4 + 2$



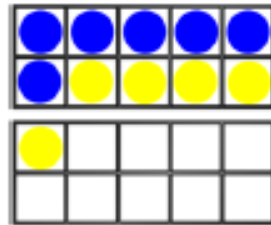
# Calculations Policy: Addition

Regrouping to make 10; using ten frames and counters/cubes or using Numicon.

$6 + 5$



Children to draw the ten frame and counters/cubes.



Children to develop an understanding of equality e.g.

$6 + \square = 11$

$6 + 5 = 5 + \square$

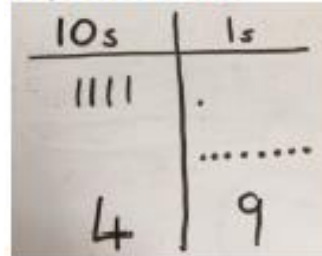
$6 + 5 = \square + 4$

TO + O using base 10. Continue to develop understanding of partitioning and place value.

$41 + 8$



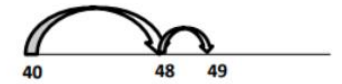
Children to represent the base 10 e.g. lines for tens and dot/crosses for ones.



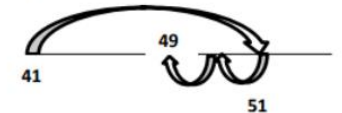
$41 + 8 =$

Number line:

$40 + 8 + 1 =$



$41 + 10 - 2 =$

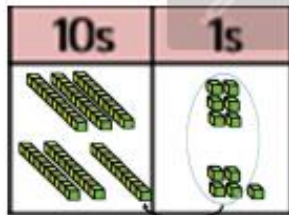


$41 + 8 =$

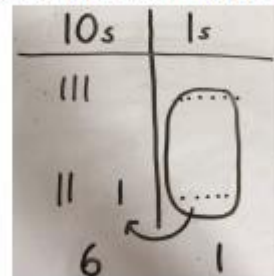


TO + TO using base 10. Continue to develop understanding of partitioning and place value.

$36 + 25$

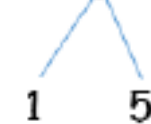


Children to represent the base 10 in a place value chart.



Looking for ways to make 10.

$36 + 25 =$



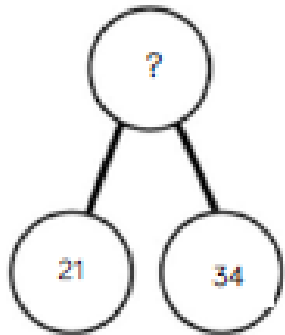
$30 + 20 = 50$   
 $5 + 5 = 10$   
 $50 + 10 + 1 = 61$

$36$

# Calculations Policy: Addition

## Conceptual Variation; different ways to ask children to solve $21 + 34$

As teachers we understand that there is a range of different ways to ask a question to make sure that children understand the key concepts fully. Below is a table of different ways we might ask an addition question.

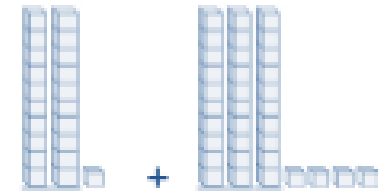


|    |    |
|----|----|
| ?  |    |
| 21 | 34 |

Worded Problems:

Sam saved £21 one week and £34 another week. How much did he save in total?

$$21 + 34 = 55 \text{ Prove it!}$$



$$21 + 34 = \square$$

$$\square = 21 + 34$$